

Prolonged survival of dendritic cell-vaccinated melanoma patients correlates with tumor-specific delayed type IV hypersensitivity response and reduction of tumor growth factor γ -expressing T cells

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Purpose The aim of this work was to assess immunologic response, disease progression, and posttreatment survival of melanoma patients vaccinated with autologous dendritic cells (DCs) pulsed with a novel allogeneic cell lysate (TRIMEL) derived from three melanoma cell lines. Patients and
Methods Forty-three stage IV and seven stage III patients were vaccinated four times with TRIMEL/DC vaccine. Specific delayed type IV hypersensitivity (DTH) reaction, ex vivo cytokine production, and regulatory T-cell populations were determined. Overall survival and disease progression rates were analyzed using Kaplan-Meier curves and compared with historical records.
Results The overall survival for stage IV patients was 15 months. More than 60% of patients showed

DTH-positive reaction against the TRIMEL. Stage IV/DTH-positive patients displayed a median survival of 33 months compared with 11 months observed for DTH-negative patients ($P = .0014$). All stage III treated patients were DTH positive and re